DSS Statistics Seminar May 17, 2024, 12:00 https://uniroma1.zoom.us/j/86881977368?pwd=S WRFcVFjMDZTa0IXZk05TE1zNm5adz09 Passcode: 432940

On the complexity for functional data

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The complexity of a stochastic process may be associated with the notion of degrees of freedom and, in some situations, may coincide with the concept of dimensionality. In this talk, complexity is studied through the use of the small-ball probability of the process. Specifically, we assume that this probability factorizes in two terms: one dependent only on the center of the ball, the other dependent only on the radius. The second term, which includes the information about the complexity, will be studied statistically: estimation, asymptotic behavior, and practical performance in a simulated and real environment.



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